Appl. No. Filed

: 09/883,851

June 18, 2001

## **AMENDMENTS TO THE SPECIFICATION**

In the following, insertions are underlined (e.g., <u>insertion</u>), and deletions are struckthrough or in double brackets (e.g., <u>deletion</u> or [[deletion]]).

## Please amend the paragraph beginning at page 9, line 6 as indicated below:

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The targets 18 of the present embodiment are constructed of a scandium titride tritide layer deposited on a copper (Cu) substrate, both substances which are well known in the material sciences, the targets having the desirable property of generating a stream of neutrons (neutrally charged nucleons) and alpha particles (ionized helium nuclei) when properly excited by the incident deuteron-tritium ion beam 10. It can be appreciated, however, that other types of targets and materials may be used in this application.

## Please amend the paragraph beginning at page 9, line 12 as indicated below:

Neutrons are created in the target(s) according to the following exemplary reactions:

2)

$${}_{1}H^{2} + {}_{1}H^{3} + {}_{2}He^{4} + {}_{0}n^{1} + 14 \text{ MeV}$$

$${}_{1}H^{2} + {}_{1}H^{2} + {}_{2}He_{3} + {}_{0}n^{1} + 3.27 \text{ MeV}$$

$${}_{1}H^{3} + {}_{1}H^{3} + {}_{2}He^{4} + {}_{0}n^{1} + {}_{0}n^{1} + 11.33 \text{ MeV}$$

$${}_{1}H^{2} + {}_{1}H^{3} \rightarrow {}_{2}He^{4} + {}_{0}n^{1} + 14 \text{ MeV}$$

$${}_{1}H^{2} + {}_{1}H^{2} \rightarrow {}_{2}He^{3} + {}_{0}n^{1} + 3.27 \text{ MeV}$$

$${}_{1}H^{3} + {}_{1}H^{3} \rightarrow {}_{2}He^{4} + {}_{0}n^{1} + {}_{0}n^{1} + 11.33 \text{ MeV}$$

Note that the energy of the incident deuteron/tritium ion beam 10 must be sufficient to overcome any coulombic interaction with the positively charged nuclei of the target material atoms. Deuteron/tritium ion energies of 0.05 MeV or greater have been found sufficient for this purpose.